

9-456 AUTHOR Van Dusen, Gilbert, INDEX NO. 6, DATE 1889
LOCALITY Ulster Co., New York and Somerset Co., Maine
(Index map coordinates) (District or quadrangle name)
(State)

Character of record Full note books of Gilbert Vandagen on collecting
trips - and under direction of Dr. Shaler
Ulster & Greene Co., N.Y. (Oriskany), Loc. nos. 1053 to
1058 inclusions
Somerset County, Maine, (Oriskany) Loc. nos. 1059-1062.

The first seven (Ulster, Greene, N.Y.) are in the lot sent to National
Museum, June 1914. The Maine (Somerset Co.) collections are still
in storage, in charge of SW. June 1914.)

Gilbert Vandagen
Zelma Holt 1889
Ulster & Greene Co., N.Y.
Loc. 1053, 1054, 1055, 1056, 1057
& 1058
Somerset Co., Maine.
1059, 1060, 1061, 1062
Oriskany formation

Station numbers

41053-1062

1889

3

Apr 23 - 89 Station 1053

Is in Ulster Co. N.Y. on
post road from Saugerties to Kingston

Section A

Valley of Esopus Creek from
Covered Bridge north of Ulster lead
Works up the creek

Apr. 24-89.

1053 Section A -
on bank of Eggemus Creek 1 m N of
Wet Lead works

2 = on the East bank is about 15
ft above ,
contains many fossils.
more calcareous than 1 and harder
ff.

3

2

43

creek

42

1 - is on the East bank below the
covered bridge.

dip $21^{\circ}30' W 35^{\circ} N$ Strike $N 35^{\circ} E$
very hard sandstone containing a few
principal spec.

Spirifer arrecta

Isocardia planata

4 On the West bank,
but crops at water's edge. Surface
covered with *Conularia* and *Conularia*
Specimens of a *Discina* and
one *Atypaea* *hypothyrida*.
A dark gray grit weathering to
dark brown.

3

$\frac{1}{2}$ mile N. of Leadworks on East
side of road to the Oniskany Sandstone
is exposed for a distance of $\frac{1}{2}$ mile.
The surface and softer layers are
entirely decomposed leaving the fossil
of which there are great quantities
free.

It comes between the 2 on the
East bank and 2 $\frac{1}{2}$ on the West bank.
The rock is a hard grey sandstone which
not decomposed.

Apr. 26

Coll. up from 41053-A-3.

Apr. 27. 89.

Sent box from Kingston
containing fossils from 41053-A-3 and the
i.e. one Oniskany S. S. and Panda Gr.?
or Schuhm. Gr. all Glenwood, Ulster Co.
N.Y. also a smaller box containing fossils
from 41053-A-3

* 1053

1053-88 C. L. Lewis Mfg.

Collected some *Giscaurus* and
various Orthocerasites? on the
dark grey l. s. at the covered
bridge

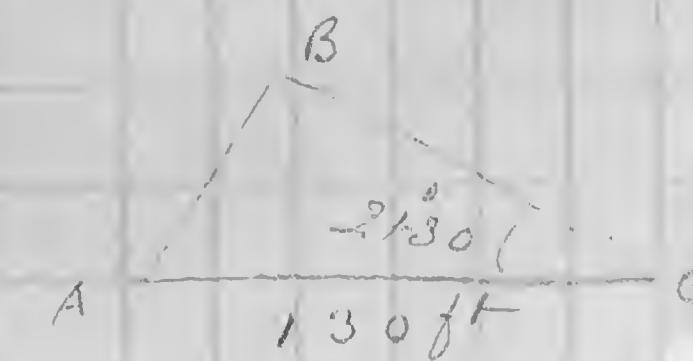
1053-4-7 as exposed at covered
bridge consists of a heavy band
of l. s. at the water edge (sup 6)
the thickness of which I have not
yet been able to determine.

4-8 Above this lie about 6 ft (loose)
of dark grey fine grained limestone.

4-9 somewhat friable where near surface
more compact underneath.

Dip same as A-1 on East side of
stream.

This rock contains a number of
pyritous nodules.



130 ft

Aug. 30-09. Monroe Co., N.Y.

3-A 3

East bank of creek, 1/2 m. from head
middle.

At 3 there is a shaly layer
very thin, fissile,
contains a few
fossils.

3E

In 3E are a number of beds of a
Planctost. *Stephanostomus*, *agilbentis*,
epibenthica, *platellites*, a *L. subtilis* bed
some small *Spinitex* like *S. intricatus*,
and numerous other forms.

From 3 up the following series
were observed



3a contains *Stephanostomus*
& *Stephanostomella*.

It is separated from 3 by a thin
shaly layer. Below bed 3

is another thin layer
containing *Stephanostomus*.

$3E = 6^{\circ}$

$3d = 11^{\circ}$ traversed by 2 systems of joints.

$3d = 6^{\circ}$ a few fossils.

had s.s. containing fossils.

$3b$

$3a$

25°

junction 3d runs N. $85^{\circ}E$
 $N 20^{\circ}E$

Line 3d has a great many
Spirifers

dip of 3a is $18^{\circ} 30' W 20^{\circ} N$

At the line from the shale
of 3 there is a prominent
ridge of the road.

450 ft. south of school house

3c is the layer from which the
most fossils have been collected.
It is very hard.

3e is a sandstone layer containing
most of the fossils found in s.s.
at East side of road.

Between it and (3d) is a thin
layer of shale with a few fossils.

\times of outc. 14

3b is $2\frac{1}{2}$ ft. thick

$3a$ is $30^{\circ} 30' N 20^{\circ} N$
not exposed surface

There is evidently a fault
running along the line
which runs $S 20^{\circ} W$.

The rocks of 3 are glaciated
while those of 4 are not.

at the head of the valley

Creek enters the valley from the West

The trend of the valley is $S 23^{\circ} W$

May 1-1889

Collected from A 3 E 1

4a Back to the middle bottom
stratum of upper gray
shale of the Gosh.
Dep. $4^{\circ} 15'$ W $30^{\circ} N$
Surface covered with tuendes
Cordaia Galli

About 5 ft. above it and appearing
backed with gypsum is
a series of fissile arenaceous
shale with lignites and interbeds
of gypsum. It is about 10 ft. thick
and weathered before the Cordaia
Galli layer.
It breaks up into blocks
readily

(Lockwood)

Upon this lie some 320 ft
4C01 harder more sandy shalts
still friable but breaking up
into larger fragments.

4B

4C contains yellowish material
Found fossils on the south bank
about 500 ft below the
West Shore R.R. bridge.

4D is a bed smooth.

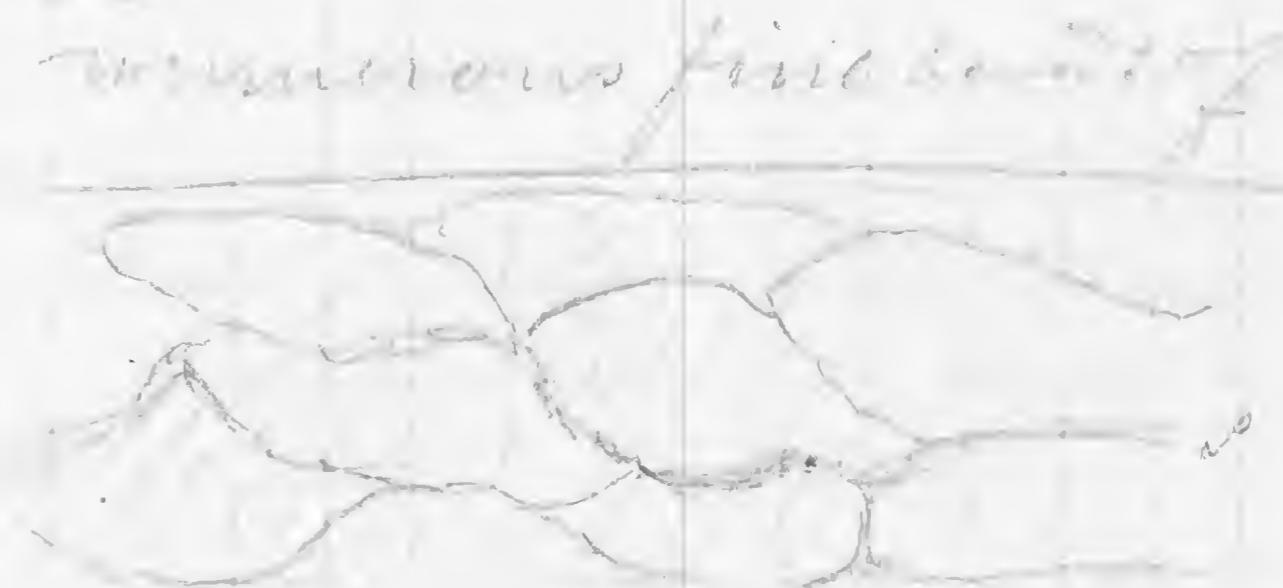
lighter in color than (C) and
more compact. The lower portion
(about 25 ft) is broken up by
joints at 4 ft to the plane of depo-
sition while the upper portion
35 ft is a tabular bed.

It is also well exposed along the
East side of the R.R. track.
The most of the fossils were
collected

2153-A.

5

About 200 ft N.E.
of the R.R. bridge is an
exposure of a light grey
limestone. Very hard,
contains many fossils.
While 4d dips about 20° N.W.
5 is almost vertical & thicker
N.E.



hand-drawn section of 5

limestone and bed of
horizontal (parallel with plane of
dip) limestone).

It contains many fossils
Coraline limestone

higher up
thin bedded sandstone

Calcareous layers.

It runs along for about 150 ft and then disappears beneath the drift.

2 mi. N. further north it appears again with a dip of 76° and strike N. 30 E. which changes to 44° within the next 100 ft and goes under the drift 150 ft further north.

It can be seen on the road from the R.R. station ^{Marion} to the ^{Marion} Prairie in the first ridge.

May 2-89

Spent day in packing up the fossils collected from

11053

A-3 + 4 + 5, Skipped the box from east Marion.

Returned to Marion in evening.

May 3-89 Took stagecoach.

Marbletown. Coniferous strata exposed along the road.

Coniferous especially well exposed at Marbletown. Collected some fossils from the stratum corresponding to A 1053 A 4d.

May 4, '89

St. 1054 - of Township of
Marbletown (with C. & H.)
Section from Upper Creek at
farm of George Van Wagner,
1 mile N. E. of Marbletown.
1 - On the west of creek at a
height of a few stone containing
fossils mostly corals in the
lower part. Exposure about
1000 ft.,
dip \approx 5° N 10 W.

2 - Overlying
It is generally hard with
but sometimes a fossil rim into

2 - Overlying 1.
Hard gray S.S. weathering brown
a few fossils. Only 6 in them

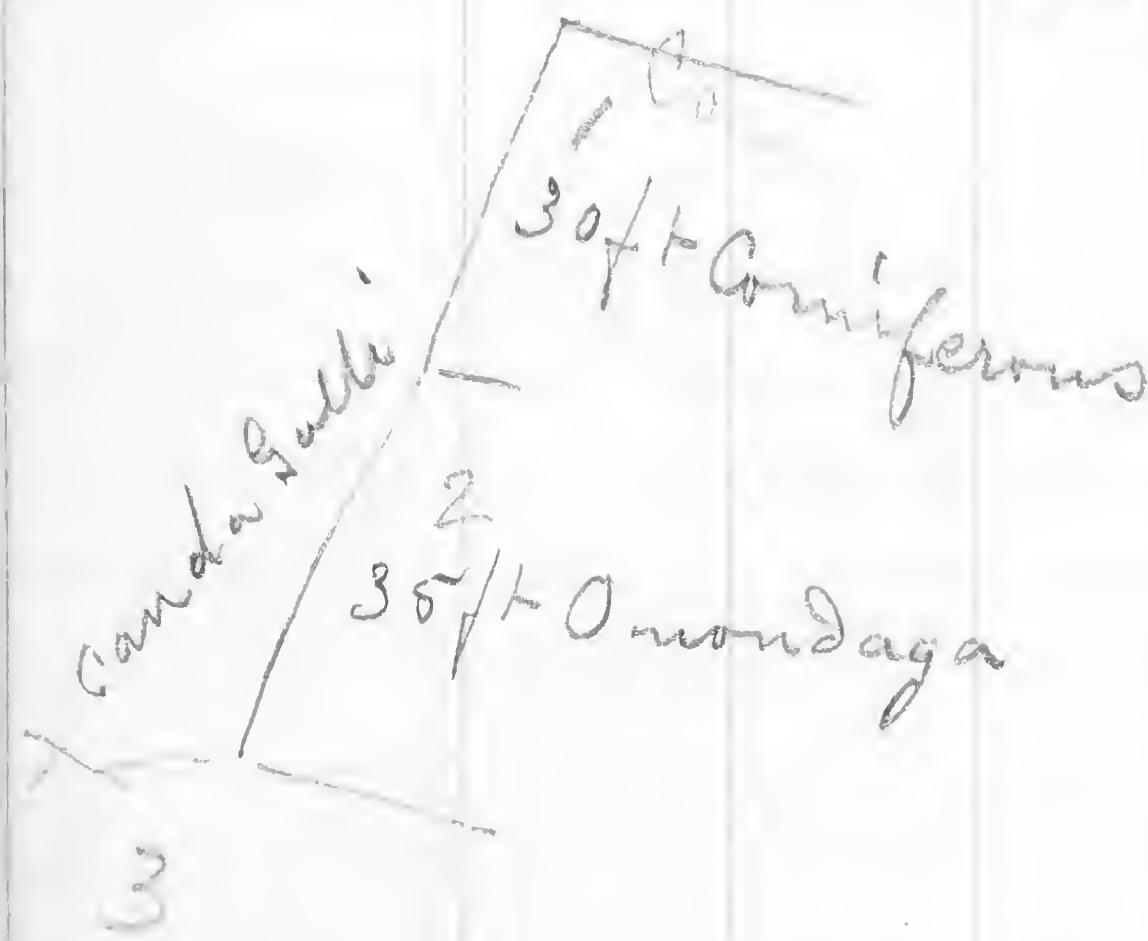
3 is a l.s. consisting of
shells
dip generally N 10 E.
W 10 N
180 ft. exposing dip 5° N 10 W.

These S.S. soon run out
for a mile & a half no
rocks are seen.

Then about 60 ft of soft, friable
shales are seen. The lower part
has their surfaces covered with
iron. They resemble the
Etna nodule bed.
They are grey where not iron
They contain a great abundance
of a minute Lingula and a
few small Lingulae. In the
middle they are brownish
and small Orthocerasites, and
not much Lingulae. They are exposed
along the creek for about 1000
feet they run under the drift.

A former title method 2 layer
below any of these in the section
was formerly quarried for flag
stone. I see where it outcrops
on the hill side and it must
be at least 100 ft below
A1

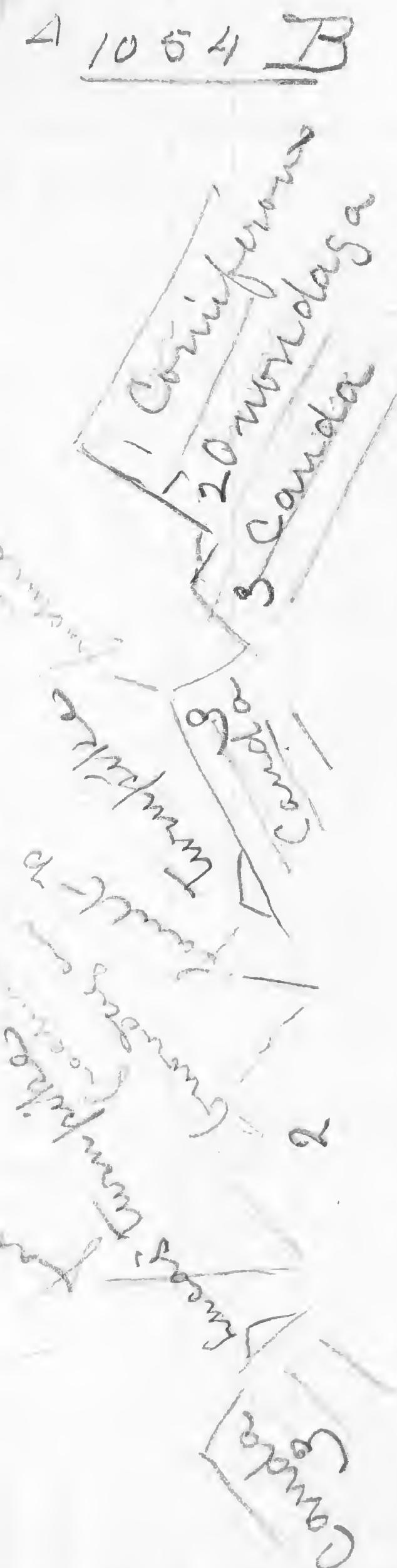
May - 6 - 89. $\frac{3}{4}$ mile E. of town
Bennett residence. -
Marbletown, Tex.



The Coniferous and Gneissic are well exposed along the line of the King's & St. M. turnpike.

Markbittens - Bushking Sintels

55 East 23rd Street



100

۱۰۰

leaving the port of
Bogotá to embark on
the river. and
the climate
was
very
dry.

at 4th Binoculars + further S.E. from the
location on page 27.

△ 1055 - A -

White - a pale yellowish white with a pinkish tinge. The pinkish tinge is more prominent in the center of the flower and gradually disappears towards the periphery. The petals are slightly curved and pointed at the ends. The flower is about 10-12 mm in diameter.

Geological Section at mouth of Beaverkill
Sta. Rosendale twps. Ulster Co. N.Y.

Section at mouth
of Beaverkill
looking north

18

2

1

Tentac. fossils
Tentac. Limestone

off light cream colored
middle rock fossils

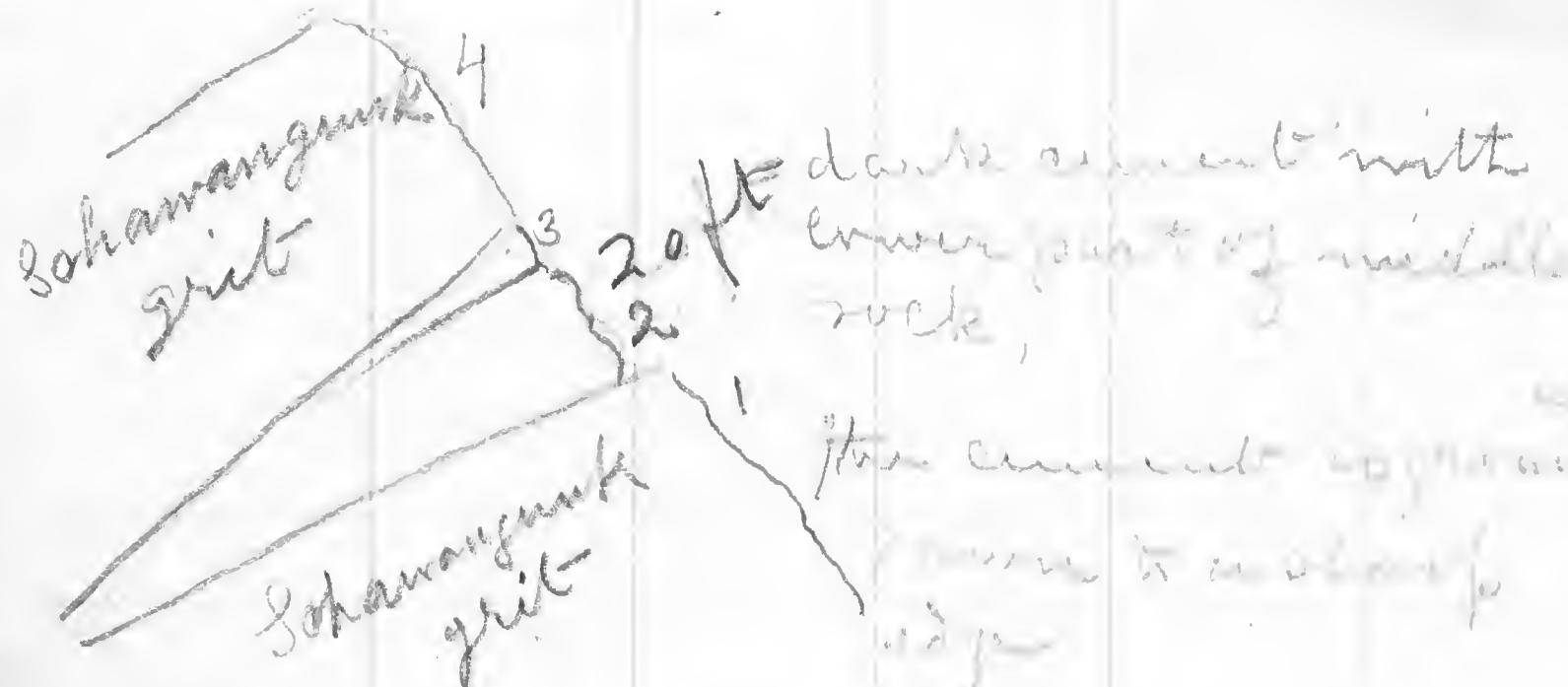
dark cream

impure limestone with fossils

1

1055 C

looking South the old
near Catholic Church at
Rosendale.



The rocks dip S. S. E.

Both surfaces of the grit are
planed on account of the grinding
against the cement rock.

Some of the grooves are 1 foot and
may be even 1-5 inches deep

1 = grit

2 = middle rock

3 = portion of dark upper cement

4 = grit

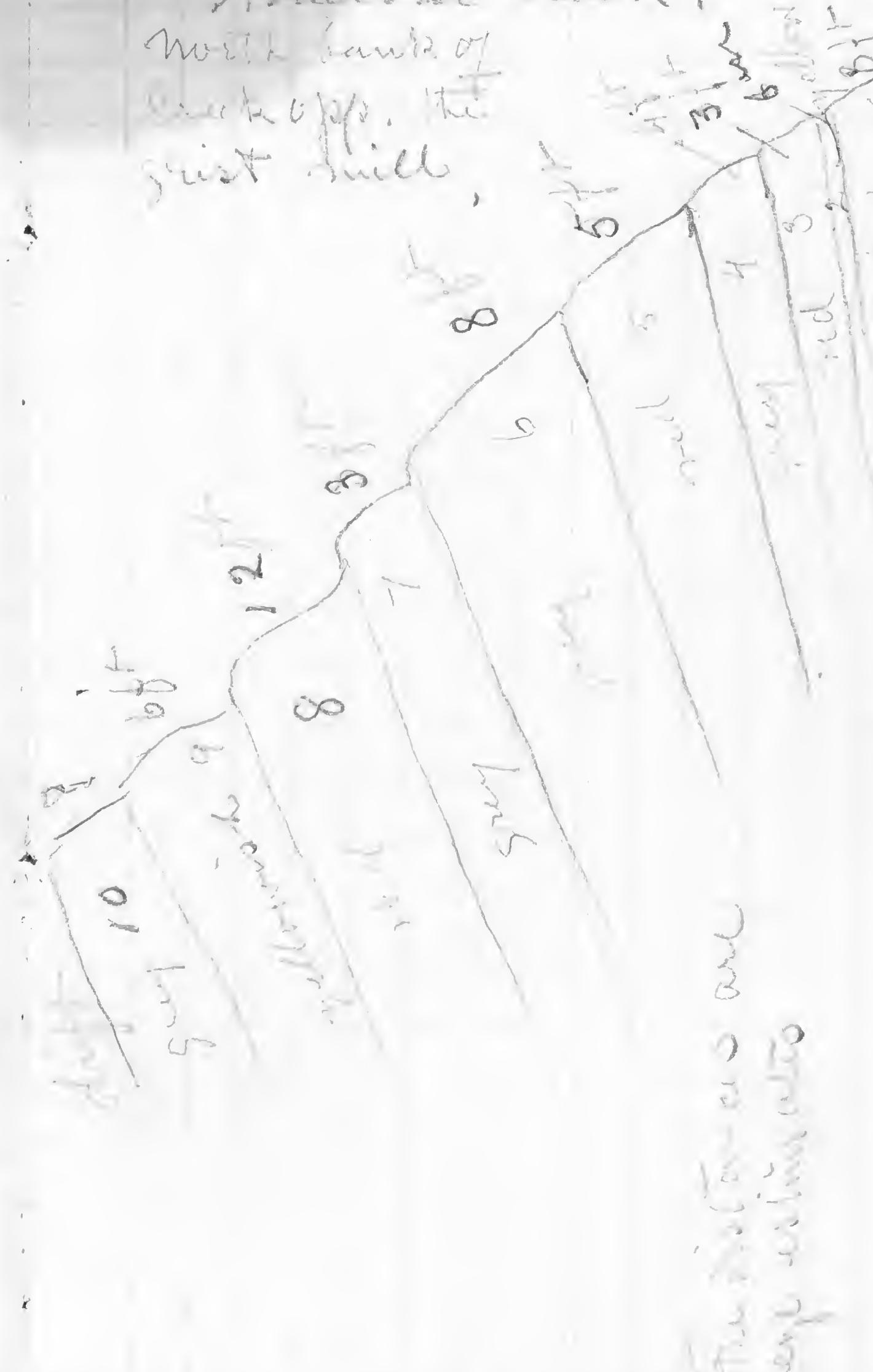
1056 A High Wall on

Rosalind Creek.

With bank of

creek opp. the

first mill.



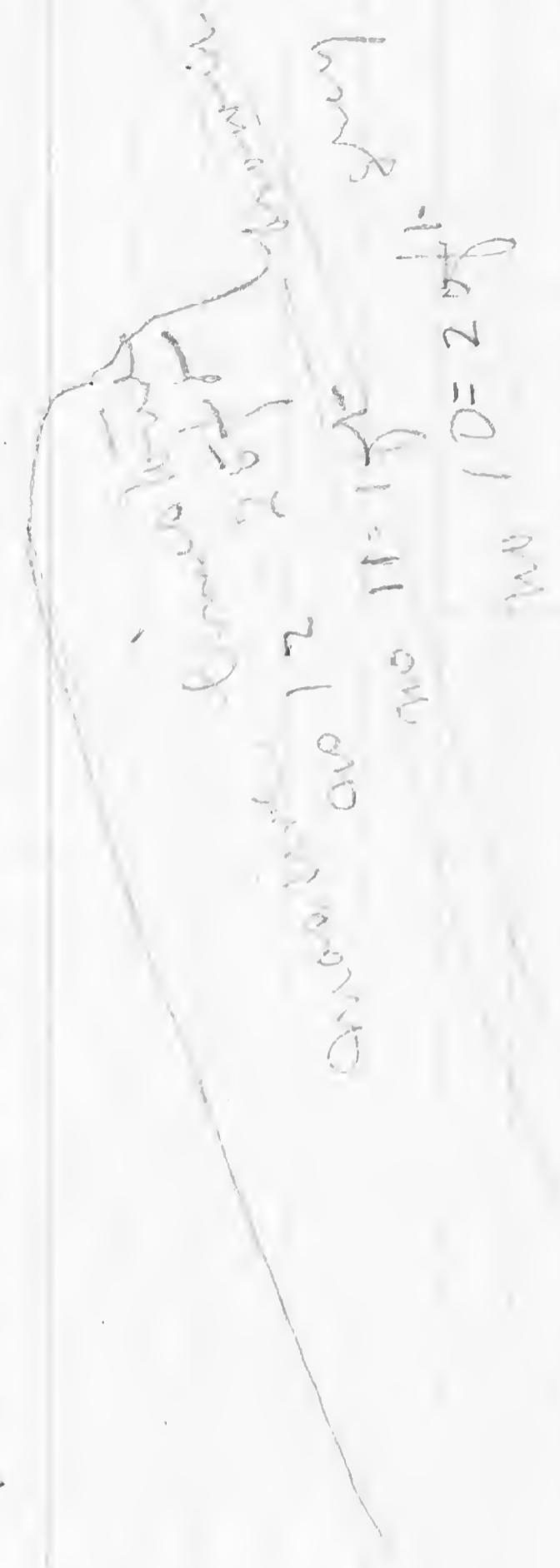
1056.0



10
A

No 12 forms the fall in the head of the creek.

It is the same structure from which in other places the "dark cement" is derived. The color changes within short distances.



Mr. Louis Berier tells me that at High Falls there is a section in which all the strata from the Medina Sandstone up to the light cement which is covered by the drift. They all lie conformably upon each other.

1055-II-1

is at the southwest corner of the 5th Bingham Lake in town of Rosendale Ulster Co. N.Y.

It is on the slope of the hill on the west side of the old Cranberry Dam.

It is the continuation southerly of 1055-A-2. Only the rock on the eastern side of the anticlinal axis is exposed. It is rich in trilobites.

It is the station where Mr. L. Berier found one of the specimens on *Homalonotus major* which

was described by R. P. Whitfield in the Bull. Amer. Mus. Nat. Hist. for

Another specimen of the same species was found the same day by Mr. Berier at

1055-A-2.

1055-A-1

Is on the West side of the anticlinal axis of Section 1055 A.

It is on the West side of Leoad turnpike $\frac{1}{2}$ mile N.W. of the 5th Bingham Lake.

Either Schuyler grit or Cananda Grit. Contains fossils. Numerous joints at cut 15 to places of deposition.

May 7-89 11054 C

On land of Andrew Middagh
about $2\frac{1}{2}$ miles N.W. of
Marbletown.

They are exposed along the
tributary of the Esopus C. and
form a cliff 100 ft (estimated) high.

1- The rock is a fissile rather
course arkosic sandstone and
contains many rounded con-
cretionary masses which are
much harder than the rock itself.
dip = 8° W 30° N.

100 ft further dip = 6° W 35° N.

The lower 28 ft are as follows

3	20 ft
2	3 ft
1	25 ft

1 and 2 are barren
3 contains fossils

The creek bed from a point
 $\frac{1}{2}$ mile above here to
Fife City is worn into the
Hamilton? Sparrengstone grit.
This extends on westward to
Phoenix? and Rubenup.
2- 10 ft of alternating hard sandstones
which resist the weathering and
form of sandstones like N. 3.
Now 3- 75 ft of dark grey sand-
stone breaking first into blocks
and then into thin layers.
It is full of fossils, Brachiopods
chiefly a Rhynchonella and Lamell-
aria with others.

May 5
"Flagstone" bed
"Flagstone" bed

1057 = Olive City Water Co. up.
Section

A on Esopus Creek beginning
on land of
3/4 miles East of Olive City P.O.

1- a rather coarse gray clay, 8 ft.
of uniform material, about 2 ft thick
2 N 70° W 100 ft

2- 8 ft of laminated sandy shales

3- S.S. 1 ft

4- Clayey S.S. with rounded
structure 7 1/2 feet - green weathering
to reddish yellow and numerous fossils

5- Sandstone 1 1/2 ft ~~2 ft~~

6- 4 inches ~~1 1/2 ft~~

7- S.S. 20 ft thick base on S.S.

8- flagstone strata 10 ft

9 the flagstone contains pebbles
and plant remains
and is composed of argillaceous

10 flagstone bed

11 7 Can be seen north of
1/2 mile above the covered bridge

It is there seen to consist of
fissile red shale running
into the sandstone and 8.

~~#1056~~

41

May 9. 1058 Adamesville N.Y.

Leaving back of Frank North's house
on West side of valley.

The rock in the quarry out of the quarry
is limestone, rather heavily bedded.
about 4 ft. thick.

3 [S.S.] Upon the limestone is
a thin bed of sandy shale
containing plant
remains. 1058 A.

2 [S.S.] 1058 B.

1 [S.S.] 1058 C.

1058 D.

May 10 and 11th rained continuously.

May 13-14 Collected some fossils
from Mr. North's quarry. I have
laid the locations of the numbered
olive oysters in the vicinity.

May 14 rained

May 15-17 A.M.

Ascertained height of Frank North's quarry
above the railway sta. to be 40 ft
(by block). The quarry is on the N.W.
side of the valley about N 40° W of
the I.S.C. + C.N.Y.R.R. Sta.

The altitude A.T. is not given in
Compton's dictionary of alt. of N.A.

Alt. A.T. ^{of track} 1332 ft (R.R. Survey)

1058 B.

Filamented quarry on mountain
the height of the house is 250 ft (block)
above the R.R. Sta.

It strikes about the middle of the
high cliff 200 ft above Frank North's
quarry.

On surface
4 flag 5 ft of 2 the fossils
3 flag 5 ft are found.
2 flag 3 ft
1 flag 8 ft

May 16-89 Lanesville N.Y.

Quarry No 1

Ed. Lanes' Quarry on hill back of his house
is about 70 ft above the bridge on road
near his house. (Locke)

Quarry No 2 1058.0

Boott further N.W. of No 1
alt. above the bridge 105 ft (Locke)
plant soil & fine

1/3 flagstone 6 ft

1/2 shaly-plant 3 ft

1 flagstone thick?

May 17-89.

Left Lanesville at 8:30 A.M.
for home.

On way down Mt + D.R. R.
saw fine exposures of rocks
looking like the shale + chuncks
in the vicinity of Stony
Hollow and along R. R
from there to Kingston.

In P.M. packed up box 6 from 1058
will be expresssed in a day or so

Maine trip

40

Altitudes A.T. of Stony Clove +
Catskill Mts R.R. in Greene Co N.Y.
Furnished by Dr. W. C. Kendall, Trustee
Sept. May 20th 1889.

Chichesters	1012 ^{ft}
Flynn's	1148
Lanesville	1332
Edgewood	1778
Stony Clove	2070
Kataskill C.	1723
Sunter	1602

May 20 - 89

Left home on 6.30 P.M. N.Y.C.
H. R. R. for Boston via Albany
arrived at Berlin Point N.Y.

Reached Canadar which is as
far north as the R.R. runs
on the afternoon of the 21st,
From there went by stage to
Bingham where put up
for the night.

May 22 The rocks about Parlin
appear on rocky upland to be
massaceous schists

Dips 90° Strike N 60° E
it is now at stage for the Parkes

May 23 - Left Parkes in AM.
by stage at Parlin Pond,
Winnipeg River at noon.

May 24th 1059 Parlin Pond Inn
W. Me.

Many boulders containing fossils
were found on the hill and
readily broken to pieces.

The rock is a large, flat
massive weathering to light
gray.

Abundant occurrences
North shore of Parlin Pond
Strike N 30° E. Dips 35° E 45°

below East shore

May 25 1059 x' A Boulder on
west shore of Parlin Pond full of
fossils.

Examined West shore of lake.
Same surface with fossils was found
on bedrock on West Shore

May 26

May 27 -

Had a man to drive me to
House River 15 m North of Parlin
Pond to look for a guide. Succeeded
in finding one, a young man, a
"river driver" who is well acquainted
with the region to be looked over.

Arrived time to report at Parlin. D
on night of Tuesday. Pay to
guide one price time of engagement

May 28. Mad mt.

At noon started out with guide to ascent Bald Mt 5 m S.W. of Starlin Rd. There are two interesting points one on each side of the ridge & separated from each other by a narrow neck of land. A heavy gray sandstone on top dips 90° N 15 W no fossils

May 29. In early A.M. went up on to the highest peak. A very high wind was blowing and a snow storm in full blast, very cold. Everything frozen. No bedrock was seen.

In afternoon returned to hotel.

May 30. m. of 15. 1. 1 m.

In morning with guide examined the hills back of Park Point (West). No bedrock was seen.

Many fossiliferous sandstone boulders were found.

In afternoon went along north shore of lake. A sandstone which is white on its weathered surface but bluish gray in its interior outcrops for $1\frac{1}{2}$ m along the shore. It dips 350° E 45° S.

The rock is extremely hard. At one point some impressions in the rock look like fossils.

(1059)

1059 C

May 31. Curin Stream

X" boulder of very white S.S. = +6 or +8.

The section of the Curin Stream
at the middle divide where the
stream runs for over a mile
through sandstone & shales.

In C-5 there is a 2 in. layer
of very soft shale 4 1/2 ft above
C-6.

In some place -12 is brown
in others gray & in others again
almost white.

-12 is shaly toward the bottom
where in addition to the *Opularia* it
contains above it certain
some others.

(1059)

51

1059 C

0	
-1	4 ft thick <u>barren</u>
-2	7 ft + fossils
-3	6 in. fossils
-4	13 ft <u>barren</u>
-5	5 ft <u>barren</u>
-6	1 ft + shaly very soft
-7	9 1/2 ft <u>barren</u>
-8	13 5 ft <u>barren</u>
-9	1 ft fossils few
-10	1/2 ft <u>shale</u>
-11	2 ft <u>barren</u>
-12	40 ft

1 ft fossils	S.S.
6 ft barren	S.S.
2 ft fossils	S.S.
7 ft barren	
24 ft S.S. thin layers with fossils on surfaces	

-12

1059

C

+ 9	25 ft bluish S.S. with ^{some} quartz veins
+ 8	6 ft white S.S. barren
+ 7	1 ft S.S. blue with ^{some} quartz
+ 6	1/2 ft white S.S. barren
+ 5	110 ft blue S.S. barren
+ 4	6 ft shaly
+ 3	1/2 ft fossils L.S.
+ 2	6 ft blue very ht. barren S.S.
+ 1	1 ft fossils
C 0	36 ft bluish very hard barren S.S.

C^8 and C^{+6} are soft like grindstone

C^{+7} is thinly laminated at top and is ironaceous

(1059)

5-8

June 1-89. In morning packed up box of fossils from "1059". At noon took box with me by stages to Jacksonport. Shipped box by C. P. R. R. via Greenville.

June 2 - Sunday. Jacksonport W.E.

June 3-89.

In morning went by canoe up into Wood Pond and thence into Attean Pond.

Examined the shores of both Lakes in search of the northern limit of the Orls Kany.

Spent June 3rd and the morning of June 4th in searching the shores.

The ledges of which there are many are all of granite.

1060

A

55

June 4-89.

In morning continued searching the shores of Otteran Pond.

All the ledges seen are granite.

About noon returned to Jackmantown.

In afternoon went with guide along the line of the C.P.R.R. East of Jackmantown.

Found a ledge of blue slate 4 miles below Jackmantown dip $45^{\circ} N$ - unfossiliferous

June 5-89-

At 9:30 AM, started down Moose River. In morning, it began to rain hard and continued all day. As I was not feeling well we pitched camp about 3 m below Jackmantown, and we spent the night there.

June 6-89-

Long Pond 4/1060

4/1060 - A -

at northwest end of Long Pond are three ledges of slate forming islands in the lake.

No 1 is nearest the inlet and to the northeast of it. The rock is a dark fissile slate about 50 ft thick. The dip is $55^{\circ} N 20^{\circ} E$. Unfossiliferous

No 2 About 100 yds N.E. of No 1 - same rock - same dip - thickness 10 ft.

No 3 - about 300 yds North of No 1 same rock - etc. thickness 25 ft

1060
A

No 4 - a ledge on north shore at Hugh Redmonds farm called by the lumbermen "The Joe Ledge". It is about $\frac{1}{2}$ mile E. of No 3.

The thickness is about 375 ft thick - dips 55° N 20 W.

1060
A

Came from Little Brassua Lake this night.

On the way down fossils were noticed in the cliff at Stoney Brook. Left for examination until return trip.

57

June 7-89-

In am. took Little A. to Stoney Brook where it will be taken to Jackman on Monday. As a raft of logs was almost at the mouth of the river we hurried down the lake and passed the rapids. The river for 6 miles is quick water, & it was very exciting work going down.

June 8-89 - 1061 Sandwich top Little Brassua Lake

1061 A on south shore of Little Brassua Lake along the line of C. P. R. R.

The section begins at the 237 mile mark and extends about $\frac{3}{4}$ mi. along the R.R. track eastward.

A⁰ is a heavy bedded sandstone layer - thickness unknown.

1061

5

A' 130 ft East of A' is 15 ft
in thickness. barren
bluish gray on new surface but
weathers to gray ~~and breaks off~~.

A² 15 ft thick hard blue
compact S.S. weathering to
whitish dip 43 N 10 W barren

A³ is 1230 ft directly ESE of
A² - thickness 60 ft of
it is more stony than A²
at 62° N 10 W. 28 ft from its
lower surface fossils were
found.

A³ forms a outcrop 100 ft long.

A⁴ 1140 ft E of marker and of
A³ about heavy bedded fine
blue, weathering to gray 6 ft thick

A⁵ a bluish brown shaly sandstone
containing fossils - 18 ft thick

1061
A

59

A⁶ hard sandstone with rounded
vertical boilings - 8 ft thick

A⁷ heavier bedded S.S. light blue
gray - 13 ft thick barren -

A⁸ 12 ft shaly dark surface
laminated barren -

A⁹ 12 ft blue gray S.S. like
A⁸ no fossils.

A¹⁰ 15 ft blue fine sand shaly
sandstone barren like A⁸

A¹¹ 50 ft hard bluish gray like A⁹
barren

A¹² 10 ft laminated shaly S.S.
with fossils.

30 ft drift

A¹³ 10 ft hard heavy bedded
sandstone barren

After finishing this section we
started down the river for
Pharsalia Lake

1062 1062

61

A 1062 Big Brassua Lake

A 1062 - A - On West & South of lake commencing with A⁰ a low ledge on first point about $\frac{1}{2}$ miles from inlet (Brassua River)

A¹ Mts a rather solid shale with very fine fossils - it dips 25° E 10 S.

Continued along shore to a point near the mouth of Brassua Stream (where we stopped for dinner)

After dinner went up stream and ran the following section

A 1062 - B Brassua Stream
B¹ is a ledge under water about 2 miles above the lake.

B² a ledge of shaly S. S. forming a fall in stream about $\frac{1}{2}$ miles above the

1062
2
B

41062-B - Brassua Stream

continued

lake. It dips 28° N 10 W
2 fossils were found in it.

B³ is the same rock with
same dip exposed 100 yards
up stream

B⁴ is same rocks same dips 100
yards further (above B³)

B⁵ same - 200 ft further

B⁶ same rock - same dips -
300 ft further one fossil

B⁷ 200 ft further the same
rock is exposed but contains
very many fossils.

B⁸ 100 ft further - same rock
with a few fossils

B⁹ 200 ft further same
rock with fossils

B¹⁰ 200 ft further same
rock no fossils -
dip 57° N 10 W

This is as far as we could go
in canoe.

Went away down stream +
camped for night.

June 9-89 - Sunday

Rained all day - came
down stream and pitched
camp on East shore of Lake
about 4 miles from outlet

1062¹
1062²

June 10-89-

→ 1062 C - East shore of
Brassua Lake

1062 C' is on East Shore 2
miles below inlet of Brassua
Stream. A ledge making out
into the lake.

A hard siliceous laminated
limestone. Color blue gray
weathering brown gray
in any quantity veins. It lies
in various directions
Dip 90° Strike W 20° S
Barely of fossils.

If continued across the lake
it would strike the N side
of 1062 A'

1062¹
1062²

1062 C²

On point forming the North
shore of Woodchuck Creek.

A very thick bed of barren
Sandstone.

The rock is traversed in all
directions by joints so as to
make the determination
of the dip impossible.

1062 C³

On point $\frac{3}{4}$ mile below
(South of) the last station near
the smaller of the two islands
3 miles from the outlet.

The determination of the dip
is difficult.

Numerous nearly parallel
lines traverse the bed in
a W 20° S direction. These
lines are not continuous.
Some fossils were found
lying in another plane than
that shown by the lines.

1062

above mentioned. If the plane of the fossil sites determines the plane of deposition of the rocks then the rock dips $18^{\circ} N 28^{\circ} W$

If the dip is 90° the exposure is 145 ft. thick in a $S 28^{\circ} E$ direction. If 18° is the dip then the thickness can be ascertained from the measurement of 145 ft.

1062 C 4

Point at corner of island 2 m from outlet being 1 m S. of C 3.

Dip $55^{\circ} N 20^{\circ} W$ as determined by fossils. The rock is of a dolomitic character with mica + iron oxide.

The large island is a continuation of the Pidgeon shore.

1076

B 1076

65
B 1076 Moosehead Lake Me.

June 11-89 - 1076 B - on South and East shore of Game Island on Moosehead Lake.

B¹ On South shore - a thinly laminated grit dips vertically strike $W 20^{\circ} S$ (A very few fossils?)
The rock is a blue gray weathering to iron gray and red
One specimen of *Spirorbis* *cauda* *tralli* was seen.

B² Limestone on North shore of first cove going up the East shore and forming ledges making out into the lake for 2 miles up the shore.

B³ Here the rock changes abruptly to a dark fine grain clay shale. A specimen of B² was collected and one of R 3 only 1 ft from it.

1076
B

The point where B³ is exposed is about directly south of B¹ and about $1\frac{1}{2}$ miles from it (by air line)

B³ is the best ledge on the East shore.

Cooked our dinner on the north end of the island and then paddled over to Locatian (Locatian).

1076
C

June 12-89

41076 C Locatian Stream.

C¹ is a ledge under water about $3\frac{1}{2}$ miles above the lake.

C² on the right bank about 300 ft below C³ - a dark fissile shale without fossils dip $73^{\circ} N 20 W$

C³ forms the first fall - a ridge across the stream - Shale - dip $75^{\circ} N 20 W$ strike $W 20 S$ thickness about 30 ft -
About 4 miles above the lake.

C⁴ on left bank $\frac{1}{2}$ mile above first fall - a ledge in woods about 50 ft back from the stream. Same rock as C³.

C⁵ $\frac{1}{4}$ mile further up - same rock - barren - dip $90^{\circ} N$.

10⁴⁶
c

c⁷ At Devil's Elbow 2 miles
below dam - a fair
exposure of shale.

c⁸ About $\frac{1}{4}$ mile below
Clark's Second Dining Camp
on left bank - About $1\frac{1}{2}$
miles below the dam -
A low ledge of the same shale

c⁹ At dam 8 miles above Luke
a fine exposure of shale
which here contains
subcircular crystals of iron
pyrite. no fossils -
Thickness about 80 feet.

10⁴⁶
c

June 13 - 89

69

A 1076 D along shore from
Loccation Stream to drivers
store house.

D' At mouth of Loccation Stream
a ledge of stone rocks as
C³ over the stream
Dip 90° Strike W 20 S \pm

D² is $\frac{1}{4}$ mile NW of D' \pm
The rock is slightly different
D² is stratigraphically above
D' - all following are
below D'

The next ledge comes between
D¹ and D² on the opposite
side of the creek.

The next is D¹ continued
across the creek.

D³ The next D³ is about
 $\frac{1}{2}$ miles from D² and shows
a thickness of 200 ft \pm

(1076)
E

D⁴ $\frac{1}{4}$ m from D³ has some
ironiferous bodies in it
5 ft thick $\frac{1}{2}$

The island is of this same rock

D⁵ forms the next point
8-10 ft thick
dips 47° N 20 W

D⁶ about 700 ft south of the last
exposure of the Shaler
is hard sandstone - heavy
bedded, no fossils
near the island $1\frac{1}{2}$ m N-E
of mouth of Tonawaga stream
dip N 20 W of course in head
of Tonawaga.

At this point the station was
abandoned on account of the
rough water.

(1076)
E

June 14-89

$\frac{1}{2}$ 1076 E Shore of Saccatuan
Point.

E¹ is on the end of the point -
a shaly sandstone with an
abundance of fossils.

The Shaly rock on the Saccatuan
Stream changes to a heavy sand
stone below the mouth of the
stream. Near the end of the
big point there is a small
point and on this small
point is the locality where the
fossils occur.

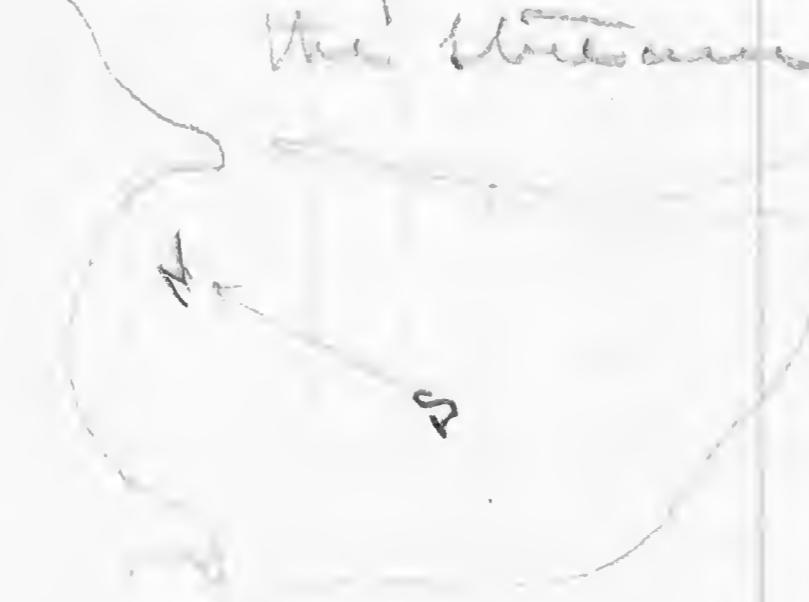
E² On East side of point with
fossils - dips 90° N 20 W

Further south the rock
changes from the heavy sandstone
to a shaly sandstone. Fossils
were found in this a point
south of Moose Brook near the

107⁶

island. The dip is $90^{\circ} N 20^{\circ} W$
There is a layer with ripple
marks. The inclination of the
ripple marks is 50°
One foot above the ripple mark
layer is the layer with the fossils
which is 3 inches thick \S
Above it there is a sandstone
stratum 4 in thick \S
E 4 on north side or upper part
of ledge - a thin band of fossils
in the sandstone \S
The thickness of E 3 + E 4 is
about 100 ft.

June 4 5-89 - to N.W. Carry
At the mouth of Williams Stream
is a fine sandbar about 200 ft
long by 10 wide. The bar seems
to be fast closing the mouth of
the stream.



June 6-89 Sunday
Returned to our camp on
Locatella Creek

(107)

75

June 17-89

1076-D continued.
11 a.m. took up 1076 II
where we had left it on the 13th

1076 II Shale on the second
island from mouth of Tombigbee
stream. It is very much
jumbled up on account of a
trap dike that runs up
through it. The traps' is
from 6 inches to 1 ft thick.
The shale is barren.

II It is a heavy sandstone
It is probably the
continuation of D 6
It dips 45° N 26 W
Rock barren. \leftarrow

No bed rocks is seen
until the core of Barker
Brook is reached.

D 9 A heavy sandstone
along the shore at the
mouth of Barker Brook
Dip is 90° Strike N 20 S
barren \leftarrow

? (This is possibly the westerly
continuation of D 8-D 6)
and B 2

The same sandstone is
again seen on the south
side of the point south of
Barker Brook.

1 p.m. the early afternoon
arrived at Roads and began
to pack up my collections.

1061
B

Aug 18-89

Spent the whole day packing up my collections.

1061
B

Aug 19-89 41061 B 2

A ledge about $3\frac{1}{4}$ m. above Stony Brook. A hard barren sandstone with veins of quartz. Dip $55^{\circ} N 20^{\circ} W$.

77

B³ At "Burnt Dame" (m above Stony Bk) here an anticlinal axis crosses the stream S

Aug 20 Started up river on return trip

Stopped off at Stony Brook on the Long Pond Rapids.

41061 B'

The rock is a hard tough sandstone, shaly in some places. The greater number of the fossils are in the shaly parts. Dip $45^{\circ} S 20^{\circ} E$ S

A fine locality

rock like B 2

Moose River

axis W 20° S

like B 2

Moose River dip $30^{\circ} N 20^{\circ} W$

axis

dip $20^{\circ} S 20^{\circ} E$

North side

South side

looking E 20° N

1059
C

79

June 21-59 Went up Pothole Stream.

Examined a hill of bedrock on the left bank miles up stream for fossils.

4 1059 C + 9 upon the stratum forming + 9 of page 52 there lie about 40 ft of gravel.

C + 10 at the second bend in the stream (at below + 9) is a dark somewhat fissile shaly sandstone 5 ft thick and containing fossils. C

C + 11 3 inches of fissile shale - The surfaces covered with beautifully colored iron deposits. Dips 25° S E many fossils.

C + 12 has no iron covered surfaces and is barren 4 ft thick

C + 13 is like + 11 with many fossils and is 6 ft thick

C + 14 is a heavy band of sandstone 4 ft thick & barren

June 22-59 1059 C. continued

Went up stream to continue the section.

The section is measured down stream as the rocks tilt S.E. and the line of section N.E. so that in dipping the stream one ascends geologically.

1059
C

1059 C

+ 10 + 11 + 12 + 13 + 14 form
a cliff on the right bank
of the stream about
1/2 mile above the mouth
of Lamo Brook.

Found 3 boulders 1059 C 4 - w 2
in the bed of stream at lower dam.
They all contain very fine fossils.

June 23 - Tuesday

Cloudy day. To bedrock
at mouth of Bear Brook.

1059
D

1059 D

81

June 24 - Wednesday

Canadar Road in town
of Jackson. 10 miles
south of Moore River Settlement
to $\frac{3}{2}$ miles north of Parlin
Pond.

The section commences with

D' on East side of Canadar Road
at Bear Brook 3 mi. north
of Parlin Pond Hole.
A massive bed of sandstone
of unknown thickness
with fossils on some layers.
The rock is very tough and grey.
Bip 18° E 20 N.

D^X A sandstone boulder with orthocerasite
D² Bluestudy chalk - many fossils
Bip 20° E 20 N.

D³ In reading no 13 a boulder with a
coral ^C

D³ lowest outcrop (no 19) of slate
fossils ^C

D⁴ Shale bed, few fossils
Bip 15° E 20 N.

The following readings were taken along
the road ascending in a northerly direction.
Done in order to compute thickness of
various layers.

Layer	Bearing	dist ^(ft)	dist ^(ft)	reading
bottom D'				
sandstone	N 16 W	5 1/4	42	1
sandstone	N 14 W	5 1/4	69	2
sandstone	N 40 E	4	18	3
drift	N 10 W	7	345	4
"	N 20 W	37	378	5
"	N 16 W	11	162	6
"	N 25 W	24	390	7
"	N 25 W	0	750	8
"	N 20 W	7	90	9
"	N 10 W	5 1/4	192	10
"	N. W.	11	336	11
D ² slate ledge	N 20 W	9	831	12
washing rough	N 20 W	10	507	13
drift	N W	6	300	7
"	N 25 W	7	156	15
"	N W	12	429	16
"	N 30 W	30	699	17
"	N 10 W	40	540	18
D ³	N	10	105	19
Johnson House	N	110	2340	20

100 ft
100 ft

1060 B

83

25

Went up to lake to Whitney
Ledge on South shore $\frac{1}{2}$
mile west of Parvin Stream

B' incutting on
C. R. R.

Sandstone very hard
much jointed - much iron
pyrite - few fossils - dip 15 S 20 E
30 ft thick.

B² laminated sandstone
upon B': much weathered
no fossils - interstratified
with thin bands of soft shale
thickness 18 ft.

B³ on north shore a 1 in
sandy shale - two fossils -
dip 10 S 20 E.

B⁴ on south shore $5\frac{1}{2}$ miles
from outlet, many fossils

1960
11

dips 70° S 20 E
thickness 40 ft -
thin layers with fossils are
in the otherwise barren
sandstone

B5 At old Port Macquarie
at upper narrows, a
large ledge of sandy slate
dips 55° N 20 W. no fossils
For the distance of 3 miles
the same slate is exposed along
the shore of the lake, until
the inlet is reached

A few slate ledges appear in
the river. The dip is 45° N 20 W
and the rock of the same
character as that in the
lakes

Reached Jackson town
in afternoon.

85

June 26 - Packed fossils all
day. Left for Utica at
12 P.M. on C.P.R.R. via
Montreal marching there
at 9.45 A.M. on the 28th.

Altitudes U. S. A.

155

U. S. G. S. Station numbers

in Ulster and Greene Co's N.Y.

1053 Esopus Ulster Co. N.Y.

1054 Marlbtown Ulster Co

1055 Rosendale Ulster Co

1056 High Falls Ulster Co

1057 Olive City Ulster Co

1058 Lanesville Greene Co

in Somerset Co. Me.

1059 Parlin Pond Twp.

1060 Long Pond

1061 Sandwich Twp

1062 Brassua Lake

1076 Moosehead Lake

Boxed up to H. S. W. Ithaca

1. Kingston N.Y. 1053 Apr 2.

2

3 Mt Marion N.Y. 1053 May 2-89

4 Marbletown N.Y. 1054-5-6 May 7-89

5 Shokan N.Y. 1054-6-1057 May 8-89

6 Lanesville 1058 May 16-89

7 Parlin Pond N.Y. via Jackman town Greenville

1059 June 1-89

8+9 Kinsac N.Y. 1060-61-62-63 only

partial collections from 1060, 1061, and

1062 June 18-89

10 - Jackman town N.Y. Stage to Skowhegan then R.R.

1060, 1061 + 1062 - June 27

Fossils of Schokaree Grit,

Hall Pal. N.Y., vol 4 p² 101

Orthoceras *Yunnanense*
Streptorhynchus *Chunmengensis*
Strophomena *dimissa*

" *perforata*
" *crinifera*
Spiriferus *fimbriatus*
Abrypsa *impressa*
many *Cyrtoceras*
Gyrocaras
Dalmatina
Phacops
Liceras
Acidaspis

Hall Pal. N.Y., vol 4 p² page 1

Cauda Galli grit almost nonfossilifer
Hemidiscus Cauda Galli
A Platyceras like *P. tortuosum* has
been found in it.

Passage from Orisk. to this grit is
very abrupt & strongly defined,
dark or nearly black weathering
to gray or brown gray with strong
joint lines nearly flat & 2 to 4
inches apart & the lines often close &
well defined while the lines of bedding
are obscure, give it the appearance
of nearly vertical stratification.

In upper part a gradual increase
of calcareous matter & passes imper-
ceptibly to the Schokaree Grit, which
contains many fossils.

Geological classification of

1130

Chunney { Chunnny < Ithaca
Portage
Gansee { Ithaca
Hamilton { Hamilton < Tully
Marcellus
Cornif. { Onondaga
{ Seneca
Schokariae
Canda Ballis
Oniskany
sp. sil. Low Helderberg

height of eye = $5\frac{1}{3}$ ft

